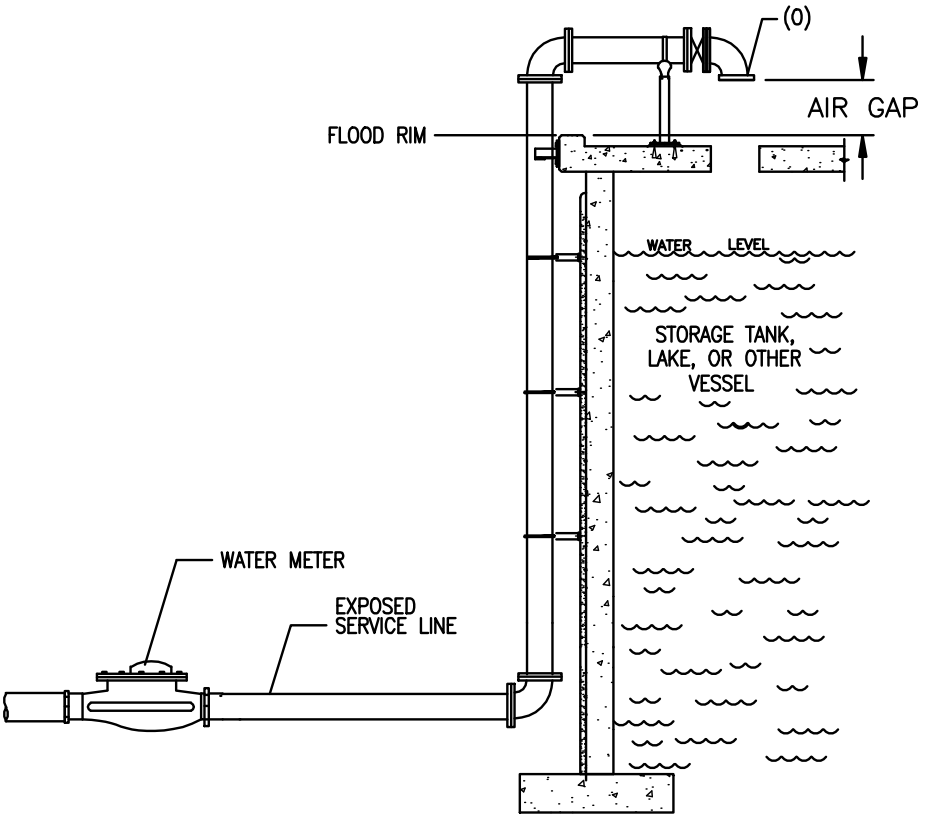

The prevention of backflow in a potable water supply system is necessary to prevent contamination or pollution of the water supply. Prevention is accomplished by the use of air–gap separations or by mechanical backflow prevention assemblies. Air–gap separations and backflow prevention assemblies shall be installed according to current Tucson Water Standard Details to assure protection of the public water supply system.

An air gap is not generally utilized for water service line protection since all supply pressure is lost. A water service line to a lake, tank or other vessel is generally where an air gap is used. However, for service protection, another deterrent is that all piping to the air gap must remain exposed.

The minimum required air–gap separation shall be measured vertically from the lowest end of the potable water outlet to the flood rim of the receptacle into which the potable water discharges. This air–gap distance shall be a minimum of twice the effective opening (0) of the potable water outlet. If the water outlet is located at a distance less than three times the effective opening (0) away from a wall or similar vertical surface, the minimum air–gap shall be three times the effective opening (0) of the outlet. In no case may the minimum required air–gap be less than one inch.

There shall not be any provisions for extending the fixture below the flood level rim. If the end of the potable water pipe or fixture outlet is threaded or allows for any type of extension by any means, a properly installed and approved backflow preventer shall be installed.

Note: the air gap may be screened or shielded with a perforated material for protection.

For additional information contact the Backflow Prevention Section at (520) 791–2650.

ISSUED:		STANDARD DETAIL		DETAIL NO.
6/97	TUCSON WATER	BACKFLOW PREVENTION AIR GAP SEPARATION INSTALLATION	TUCSON WATER	SD-1800
REVISED:				
9/08				SHEET 1 OF 1